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POPULATION INTERRELATIONSHIPS IN DEVELOPMENT
PLANNING AND THEIR IMPLICATIONS IN AFRICA

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I. INTRODUCTION

Opening the third session of the Conference of African Demographers, the Executive Secretary of the Economic Commission for Africa (ECA) told the delegates in his address that "The twenty-first anniversary of the establishment of the ECA, as an organization charged with helping to transform the economic and social conditions in a continent that is at the crossroads of development, provided a fitting opportunity for reflection on the causes and consequences of prevailing economic and social conditions in the region". He continued "it would be appropriate to evaluate the major achievements and failures of the past with a view to evolving defined strategies for a programmed development, including strategies in the population field since the population of a country is both a motivator and beneficiary of all development".

The extent and complexity of the interrelations entailed in the process of economic and social development underlines the need to take full account of all the relevant variables in trying to determine the pace and direction of development: hence the need to adopt a multi-disciplinary approach in development planning. In this connection it is in fact difficult to think of how population variables can be ignored since they determine to a great extent the role that the population, one of the major agents of development can play in the development process, which in turn influences considerably the future role this agent can assume during the plan period. Despite the complexity and the intricate nature of the interrelationships between population and other factors in socio-economic development, it is becoming gradually recognised in Africa, especially since the World Population Conference in 1974, that population variables play an important role in the process of socio-economic development and therefore need to be given greater attention in planning. African Government delegates are known to have played an important role in shaping the final version of the World Population Plan of Action, which stresses the need to consider all population policies and programmes as integral part of the planning process and not in isolation or as separately designed programmes of action purporting to accelerate the pace of economic and social development.

Though it is true that not all people are agreed on the actual role that population variables play or the type or influence that population variables have on the development process, it is however becoming accepted that they influence socio-economic development, while they themselves get influenced in the process. The aim of this paper is to review or examine some aspects of the role that population variables could play in the development process and their implications in order to establish that some influences exist which need to be given attention, depending upon how a planner sees them vis-à-vis the aspirations of his government. It is worth pointing out that the role of population factors in socio-economic development in any country depends to a large extent on the conditions in the country at any particular time and how these conditions are seen and exploited. This is the reason why it is difficult to understand Malthus and his pronouncements on population unless he is put in the context of his times.

II. THE DEMOGRAPHIC SITUATION IN AFRICA AND THEIR IMPLICATIONS

The population of the African region as compared to the population of other regions of the world is small in relation to the land area of the continent. The total population is estimated to have risen from 275 million in 1960, to 406 million in 1975 which is expected to rise further to 828 million in the year 2000. The annual rate of growth implied in these are therefore rising from an average of 2.6 % for the period 1960-1975 to 2.9 % for the period 1975-2000. Despite this high rate in the growth, the density of the population which is estimated to have been 9 persons per square kilometre of land in 1960 was 13 in 1975 and will be 27 in 2000. There is therefore no pressure of population on land area as such in the region as a whole as compared with conditions in the other world regions, though it must, however, be pointed out that this is a crude measure which does not take into account the availability of resources for development.

On the other hand levels of fertility are still very high and in most cases not showing any signs of decline, while at the same time levels of mortality, though relatively high as compared with those of other regions of the world, have begun to decline and sharply in some countries over the last few years. The crude birth rate which is estimated to have been about 46.0 per 1000 population during the period 1975-1980 is expected to fall to about 37 per 1000 during the period 1995-2000, while the crude death rate is expected to decline from 17.0 per 1000 during the period 1975-80 to 10.6 per 1000 in the period 1995-2000. By the year 2000 it is estimated that Africa will continue to have the highest rates of birth and death as compared with the other regions of the world. It is the existence of these features that have given rise to high rates of population growth in the continent, which are even likely to accelerate in the future as levels of fertility remain high and constant, while mortality continues to decline with improvements in health services and general improvements in the standard of living.

The high levels of fertility and declining mortality have given rise to a high proportion of children in the population, and therefore high dependency ratios whose implications have already begun to be felt by many governments of the region by way of the heavy expenditures on education and other social services for the fast growing population. The proportion of the young (0-14 years) which is now estimated to be about 45 percent of the population is expected to fall only to about 42 percent of the total population as compared to about 25 percent and 22 percent respectively in the developed areas of the world. On the other hand the proportion of the population of the working ages, that is 15-64 years, will increase from about 52 percent to only about 54 of the total population. In terms of rural urban distribution the region is in general characterized by great unevenness in the distribution of its population among countries and within countries, with a multiplicity of small hamlets and villages, few medium-sized towns, and few cities, which are in most cases getting overcrowded. Though the degree of urbanization is generally low in many countries, the rate of growth of the urban population is very high.

The implications of the demographic situation in Africa portrayed above for socio-economic development are quite considerable. Demographically population trends are expected to put more pressure on the economies of almost all African countries and especially on certain sectors. The areas in which the countries are likely to feel the pressure most are education, employment and food production. The pressure mainly arises from the fact that additions to the population needing education, employment and the population to be fed adequately is increasing at a rate far more than most of the countries can cope with. Table 1 below shows the growth in the school age population (5-24), the potential labour force (15-64) as well as the total population in Africa. The implications of these figures for the countries of the region will be examined in later sections of this paper. In the face of these demographic features on the African continent, different African governments have expressed different views on different aspects of population and their implications for socio-economic development. During the 1960s the predominant attitude expressed in many development plans was one of pronatalism which was in favour of high fertility and high rates of population growth which was seen as a means of providing labour force for the development of the continent's natural resources and an expanding domestic market. Though attitudes seem to have been changing gradually over the years, as will be shown later in the paper, there has not been much change in many countries mainly because the problem is always seen in terms of population densities which are at present relatively low in many countries.

III. RELATIONSHIP BETWEEN POPULATION VARIABLES AND DEVELOPMENT IN SOME SECTORS

The precise nature of the complex relationship between population trends and socio-economic development differs among different regions and countries and even different parts of the same country, depending on the available resources and the ability to exploit them in the different situations. Important variables to consider in this respect are the age structure of the population, the density, the settlement patterns including internal migration and the degree of urbanization and above all the rate of population growth in relation to economic growth. The interrelationships can be illustrated from their influences in some sectors in which they appear to be more easily understood especially in the African context e.g. those connected with Health, Education and Labour Force and Employment. These will be examined only as illustrations, to show the problems and potentials that population trends hold for socio-economic development in Africa.

(1) Population and Health

The relationship between population and health is one of the interrelationships whose effects have been very well illustrated and felt in many developing countries. Health has been known to influence directly levels of mortality and morbidity, population growth and fertility directly or indirectly. It also has considerable influence on migration, productivity and attitudes to work. Population growth (which is influenced by health), in turn influences the demand for health services. A rapid increase in numbers for instance, creates a strain on the health delivery system and hence the development effort. This is already the case in Africa.

TABLE 1 - ESTIMATED GROWTH IN TOTAL POPULATION, SCHOOL-AGE POPULATION (5-24) AND POTENTIAL LABOUR FORCE (15-64) - 1975-2000 BY COUNTRY

Country	Year	Total Population			School-age Population (5-24)			Potential Labour Force (15-64)		
		Number (000s)	Percent increase 1975-2000	Annual Rate of Growth (%)	Number (000s)	Percent increase 1975-2000	Annual rate of growth (%)	Number (000s)	Percent increase 1975-2000	Annual Rate of Increase (%)
TUNISIA	1975	5,608	70.0	1.2	2,677	49.0	1.6	2,955	104.0	2.9
	2000	9,563			3,994			6,034		
TANZANIA	1975	15,393	120.0	3.2	6,914	133.0	3.4	7,927	121.0	3.2
	2000	33,794			16,133			17,510		
CONGO	1975	3,170	97.0	2.8	1,514	92.0	2.7	1,630	104.0	2.9
	2000	6,260			2,921			3,424		
SINRAI LEONE	1975	3,045	99.0	2.8	1,354	108.0	3.0	1,623	99.0	2.8
	2000	6,056			2,823			3,228		
RUANDA	1975	4,120	119.0	3.2	1,892	129.0	3.4	2,120	115.0	3.2
	2000	9,000			4,345			4,631		
LESOTHO	1975	1,192	75.0	2.3	511	82.0	2.4	659	84.0	2.5
	2000	2,089			931			1,214		
TOTAL AFRICA	1975	406,000	104.0	2.9	184,892	109.0	3.0	212,257	112.0	3.1
	2000	828,000			387,119			450,459		

SOURCE: 1/ United Nations Population Division, New York - World Population Trends and Prospects by country 1950-2000

Though levels of fertility especially infant mortality are still relatively high in many African countries as compared with those in developed countries, there is no doubt that there have been considerable declines in all the countries and in some cases sharp declines. The demographic effects of this has been significant in Africa. Better health which has come as a result of the adoption of modern health services has resulted in higher life expectancy especially for the young. This is a fact that has long been realized by governments of the region. Thus the aim of Tanzania's health plan for the period 1964-1969 was to increase life expectancy at birth from 35-40 years to 50 by 1980. A similar plan in Gabon for the period 1966-1971 aimed at the reorganization of the health services to cover the whole population with particular attention for the protection of infants. The decline in mortality is one of the main causes of the high increase in the proportion of the young in the populations of African countries whose main implications are illustrated in the next section of this paper. Though the effect of better health on fertility is more difficult to assess, it is generally accepted that better health enables more women of the child-bearing age to live longer and participate in the process of reproduction, which, all things being equal, increases overall fertility. ^{1/} The absence of certain prevalent maladies like malaria and venereal diseases also help to reduce pregnancy wastage ^{2/} and thus increase fertility. Malaria, for instance, is known to be responsible for a considerable number of spontaneous abortions that take place in many African countries; therefore its eradication will help increase the number of pregnancies that end in live births. Another likely effect of reduced infant and child mortality, which is generally recognized, is the incentive it gives to mothers to have fewer children ultimately, since the need to have many in order to ensure the survival of the number desired is removed.

Better health at least in the short run therefore means an increase in the rate of population growth. This effect is at present being experienced in Africa because of the considerable declines in mortality coupled with constant high fertility. This in turn creates the need for more efforts in socio-economic development in all fields to cope with the feeding, housing, education and the generation of more job opportunities for the population. The eradication of diseases can also influence the redistribution of the population. Thus the eradication of river blindness, at present prevalent in certain areas of the Volta basin of West Africa, is likely to change the sparseness of the distribution of population in the area affected.

^{1/} Woods, J.R. (1976) Urban and Rural Natural Increase in Chile. *Milbank Memorial Fund Quarterly* 43, 71.

^{2/} World Health Organization (1973). Health trends and prospects in relation to population and development. Paper presented to the World Population Conference, Bucharest 1974.

Better health influences further economic development by helping to increase the productivity of the worker, increasing economic output and improving distribution and consumption while it may impede development by increasing the dependency burden or by increasing unemployment. Better drinking water, more nutritious food and better sanitation also enhance health. The direct relationship between the level of nutrition and level of infant mortality is one that has long been recognised. Lastly it should also be mentioned that certain specific development projects negatively influence health. The best example is the effect of man-made lakes on the spread of certain diseases like bilharziasis, where no measures are taken to reduce the risk. The relationship between health and socio-economic development through its influence on population variables could therefore be quite considerable and cannot therefore be ignored since better health is always a goal man strives to attain, as can be seen in all development-plans, as part of the effort to improve the quality of life.

Despite all the benefits that African countries have managed to gain and could gain from modern medicine especially by way of substantial gains in the expectation of life at birth, they have not derived as much as could have been because of a number of reasons. First is the fact that medical facilities are mainly based in the urban areas with the result that the majority of the population cannot benefit from these services. It is estimated that in some countries as much as 70 to 80 percent of the population do not have access to available services. Second, health services, even where available at all, are very sparsely distributed in the rural and urban slum areas mainly because of the improper distribution of the facilities and personnel which usually tends to avoid unpleasant and difficult areas. Third, the health services are mainly of the curative type and hospital-based which makes them very costly and therefore not easy to reach the majority, though it is known that the majority of deaths can be stopped through preventive and public health services at relatively lower cost. It is estimated that "in many of the countries which have life expectancies of less than 45 years as much as 20 percent of all deaths are attributed to infectious diseases which could be appreciably reduced by continuing programmes of preventive medicine and public health regardless of any slowness in economic development" ^{1/}. Fourth, is the adoption of Western style health systems without any sort of modifications to suit the countries of Africa. Next is the acute shortage of personnel, who in the present system are costly and slow to train, and cannot be trained in the quantities required. Another cause which cannot be ignored is the unwillingness of the trained medical personnel especially the physician to change and adapt the system to suit the poor countries in which they practice. Finally the resources usually allocated to health services in national budgets are inadequate compared with the needs.

All these indicate the extreme need to reform health services in the countries of the region to make it possible for the majority of the population to derive the maximum benefits from them. Without these reforms to deal with the shortcomings the services will continue to be inadequate, serving only the few in the urban areas.

^{1/} WHO 1974, *idem*.

(2) Population and Education

The relationship between population and education, like the other types of interrelationships, is one that is complex in nature, because neither education nor population can be easily isolated from other variables that come into play in the process of socio-economic development. Changes in population variables like fertility and mortality patterns and their trends, which determine the rate of population growth and also the size of the population needing education generally, form a part of the general social and cultural changes. While large families may be associated in certain circumstances with poverty, malnutrition, ill-health and unemployment, which in turn may be due to poor and inadequate educational systems, in other historical circumstances in under-populated areas, high fertility rates, often implying large families, may contribute to economic development and thus to providing resources which can be used to finance education as well as other social services. 1/

One generally observable feature in all development plans in Africa is the attention given by governments to the provision of education for their citizens and the high proportion of national budgets allocated for education. The governments do so, first because of their desire to provide skilled manpower for economic and social development and secondly, because they consider education as good in itself and in fact in recent years as a human right. However, in spite of these good intentions and the fact that the proportion of the world's population in school has increased considerably in recent years, it is also true that many more do not have access to educational facilities, though they would like to be in school. Thus "while universal primary education is already a reality in some countries, in many, it is only a proclaimed and distant goal" 2/ which perhaps may never be realized despite all the goodwill on the part of both individuals and governments. This is particularly the case in many African countries because the additions to the population at risk are at a higher rate than the rate at which they are being put in school.

Available data show that "Student enrolment rose more rapidly in the generation after the Second World War than ever before in history. From 1950 to 1960, the number of persons attending schools and universities increased by 102 million. The rise was even more rapid during the past decade. Between the years 1960 and 1968, the total number enrolled in the three main levels of education rose from about 325 million to some 460 million - an increase of 135 million or more than 40 percent. This is 100 percent greater than the corresponding rate of increase in the population of school attendance age, and 135 percent higher than the world demographic increase during the period". 3/

Information on African countries shows that the trends were not different from what is given above. Enrolment at the first level in Tanzania, for instance was doubled while it increased by more than five times in Somalia between 1965 and 1975.

1/ UNESCO, 1974, Population and Education - Paper prepared by UNESCO for the World Population Conference.

2/ UNESCO, Idem.

3/ UNESCO, Idem.

Other countries are also known to have shown some spectacular increases, though not as high as in Tanzania and Somalia. The difference however is explained partly by a slowing down in the countries which had already made striking progress during earlier periods. This trend is best exhibited by Rwanda. But even here, the increase in enrolment was as high as 21 percent, while the increases in Lesotho, Tunisia and Sierra Leone were 32, 33 and 63 percent respectively. Enrolment at the second level was even more spectacular for all these countries ranging from, for example, an increase of 50 percent in Rwanda to 300 percent in Lesotho. The increases were even more striking at the third level though this is partly explained by the low base in 1965. 1/

At the continental level enrolment at the first level increased by 68 percent, by 174 percent at the second level and by 189 percent at the third level during the period 1965-1975. Enrolment at all three levels showed an overall increase of 30 percent during the period under review. The trend in the demand for expansion of education has been very clearly and succinctly described by UNESCO in the following words. "Education, once a sphere reserved for a few, is now a common concern of the multitude. In all its forms in-school and out-school education has become in the last decade the world's biggest industry, engaging more people and expenditure than any other human activity". 2/

Yet despite all these efforts, governments realize that the ranks of the children they cannot provide for, continue to increase beyond their expectation. While it is true that many factors account for the expansion in the number in schools, there is also no doubt that population growth partly accounts for or in fact is a major cause of the present situation where the needs of still large numbers remain unmet. This is a fact that has to be recognized by policy makers in the African region. There is enough evidence to show that even with the phenomenal increases in the expansion of educational facilities and the number benefiting from these facilities, the number of illiterates is on the increase and will continue to rise. UNESCO in its paper presented at the World Population Conference in Bucharest indicates that "between 1960 and 1983 the proportion of school-age children attending primary or secondary schools rose only from 24 percent to 28 percent in Africa, from 36 percent to 45 percent in Asia, from 40 percent to 51 percent in Latin America and from 22 percent to 30 percent in Arab countries. Another disturbing factor is that more recent enrolment statistics show a general trend towards a decrease in the rate of expansion, i.e. enrolments are still increasing but not as fast as from 1960 to 1965. Population growth, however, has not slowed down". 3/

1/ UNESCO - Statistical Yearbook, 1977

2/ UNESCO, 1974 - Population and Education - Paper prepared by UNESCO for the World Population Conference.

3/ UNESCO - Idem.

It is worth pointing out that the population that needed to go to school in Africa increased from 123 million in 1960 to 152 million in 1968 or a percentage increase of 24 during the period. Added to those that could not attend any school at all is the number of drop-outs which has been increasing at an alarming rate in recent years.

Table 1 also shows that despite the increases shown in school enrolment in different countries the numbers actually enrolled formed only a small proportion of the numbers that actually needed to be put in school. Thus in Tunisia the proportion enrolled formed 42 percent of the population at risk or the school-age population in 1965 and only 45 percent in 1975. In fact in Rwanda and Lesotho the proportions actually fell from 24 percent to 23 percent in Rwanda and 61 to 47 percent in Lesotho. This in essence means that the ranks of the illiterates are rising. This is partly because in many of the countries the rate of growth for the school-age population is very fast and in fact faster than the rate of growth of the total population as shown in Table 1. At the regional level the situation is still worse where the proportion in school formed only about 22 percent of the population at risk in 1965 and 29 percent in 1975.

With the exception of Tunisia the relative additions to the school-age population is expected to be higher than the additions to the total population in the other countries. Thus in Tanzania for instance, while the total population is expected to increase by 120 percent the increase in the school-age population will be 133 percent between 1975 and the year 2000. Similar but slightly lower increases are expected also in Sierra Leone, Rwanda and Lesotho. At the continental level the percentage increase for the period is expected to be 109 while the percentage increase in the total population will be 104. The case of Tunisia illustrates very well the effect of declining fertility on the size of the school-age population. The addition to total population is expected to be 70 percent while the increase in the school-age population will be 49 percent during the period. This is because the level of fertility, which is already on the decline, is expected to decline further during the period 1975-2000. But even here the annual rate of growth of the school age population is expected to be higher than that of the total population as in the other countries.

The figures given above indicate to some extent the effect of population growth on the demand for education. The plain fact is that the numbers that have to be catered for are usually determined by the relationship between past fertility behaviour and mortality. Since fertility rates are still high and mortality, especially in the early years is declining in the African region, the school-age population is bound to grow at a higher rate than the total population. The young age structure that results from this trend complicates the problems of providing the educational facilities which are so vital for socio-economic development in the long run. The burden that has to be shouldered in terms of costs in the provision of teachers, equipment and buildings has long been felt by many Governments. Table 2 below gives an indication of the expenditures on education in some countries and an estimate for the whole region. When one considers that so much is being spent on education only for a relatively small proportion of those who need education, while there are other equally important areas like health to be catered for, then the burden can be well imagined.

TABLE 2:

ESTIMATED PUBLIC EXPENDITURES ON EDUCATION IN SOME COUNTRIES

Expenditure on education as percentage of	Year	C O U N T R Y					
		Algeria	Yemen	Ivory Coast	Kenya	Burundi	Botswana
All public expenditure	1965	14.8	26.3	21.2	15.3	20.0	10.1
	1970	12.9	29.3	24.1	14.4	25.0	12.3
	1975	14.3	39.0	35.3	20.5	22.7	12.7
Gross national product	1965	4.0	3.8	5.4	4.6	2.0	4.4
	1970	5.8	4.5	6.7	4.1	2.6	4.8
	1975	6.1	6.0	7.3	5.7	2.4	7.2
							5.7
							5.4
							4.9
							Total
							Africa

SOURCE : UNESCO, Statistical Yearbook, 1971.

The high increases in the population at risk do not only put pressure on the facilities in terms of numbers to be catered for but also creates, in so doing the tendency to sacrifice the quality of education to some extent. Thus many countries have now been compelled to resort to increases in the student-teacher ratios considerably and the "two sessions per day", or "shift" system which is usually detested by many parents since, they think, it does not give the children enough time at school. On the other hand one consolation may be that rapid population growth, by generating pressure on existing educational facilities may help bring about the needed educational reforms.

Also important is the relationship which has been established between the level of education and fertility. Even the meagre data available give some indications that there is a relatively high correlation between high literacy or level of education and the level of fertility. The indications are that the higher the level of the education of females the lower their fertility level, though the change appears only after a certain number of years of schooling. The main reason for the difference in the level of fertility is that girls spend more of their early years in school and are therefore kept out of the reproductive process for a longer period than they would have been if they were not in school. Moreover the desire of educated women to stay employed outside the home makes them space their children better and even reduce the total number of children borne to them. It is partly for this reason that African countries argued at the World Population Conference in Bucharest that development would itself bring about lower fertility without any population policies and programmes by governments to effect this. However this is a phenomenon Africa has not been able to take much advantage of because the enrolment of females in schools and their employment outside the home are still very low and have not reached the state that could have much of a declining effect on the levels of fertility.

Education also helps the process of innovation and helps social mobility thus reducing social inequalities. One good example of the effect of education on innovation is the acceptance of new ideas in the field of health which have helped the mortality decline in Africa. New ideas have got to be accepted and learned. Thus children are more likely to survive in a household where mothers are less attached to traditional ideas and insist on more equal share of food and equal treatment between all members and the appropriate health precautions taken in running the household. Lastly, one cannot afford to forget the main purpose of education as seen by governments, to provide the skills needed by the population for socio-economic development and hence to improve the quality of the work force, its productivity and ultimately quicken the pace of socio-economic development.

From the evidence already provided, it can be seen that the desire to equip the population with the skills needed for rapid development and make education a universal human right has eluded many African Governments for a number of reasons among which population dynamics is an important one. As already shown the demographic situation is one that makes for a rapid growth in the young and therefore increases the school-age population at a very rapid

rate. This is an important characteristic of population dynamics that needs to be noted and given attention in Africa especially if the desire to equip the population with the needed skills and the literacy needed to help modernize the society is to be met.

It must however be pointed out that apart from the rate of the population growth which obviously has contributed to the inability of governments to educate their population, there are other institutional factors which have also contributed and will continue to be obstacles in the way, unless the necessary reforms can be initiated soon. In this regard, an important question that needs to be answered is, should Africa necessarily continue to stick to the type or mode of education inherited from colonial powers with all the shortcomings that have already become apparent. The evidence so far is that the numbers that cannot be provided for, inspite of all the goodwill and effort, continue to increase: the pupil/teacher ratios continue to rise especially at the primary level, while it is falling in other regions of the world. School supplies are getting scarcer from year to year in many countries because of the shortage of the foreign exchange needed for their importation, while the inability to provide school accommodation for children is becoming more common in all countries. Yet in the face of all these difficulties many countries continue to stick to the boarding school system especially at the second and third levels as well as other traditions and practices which make it possible only to provide for the needs of fewer and fewer numbers every year.

Even in terms of content it has long been felt in many African countries that the type of education given to the population does not equip the population with the type of skills needed for the rapid socio-economic development required in Africa to improve the quality of life. Education has tended generally to be more theoretical and of the academic type instead of being more technical and has therefore tended to equip the population more for white-collar jobs. Even the wage structure and the status-structure have tended to encourage and perpetuate this type of trend in educational development and discourage many from entering the technical fields especially at the middle level where there is a bottleneck. The result is that the educational systems have always produced many with non-usable skills, few with usable skills and therefore many literate unemployed.

Though these faults with the current system have already been recognized, many of the countries have not gathered enough courage to introduce the innovations needed to reverse the trend. There is obviously the need to reform educational systems in Africa to make them benefit the majority who cannot derive any benefits from the existing systems. The time has come to adopt radical measures which will not make the provision of facilities as expensive and as foreign-oriented as it is now. Education must consist not only of the strictly school-type programmes but also of training facilities for all those who will be called upon to control the more complex instruments of development. ^{1/} It is for example very pathetic that almost all African countries derive the major proportion of their revenues from agriculture and yet the education given to the young is the type that makes them hate agricultural work and increases their love for white-collar jobs which make them immigrate to the urban areas. Attention should be paid to the school drop-outs who are on the increase in the region in order to provide them with the skills needed for development instead of leaving them

half-educated and without any usable skills and unemployable. The greater use of the vernaculars to produce more literates should be encouraged as a means of improving the life of the rural adult population. The problem of shortage of teachers can be obviated through the greater use of self-education methods. Finally there is the need to make the educational system less dependent on imported facilities and to establish the industries which will produce school supplies locally in order to reduce the cost of education and make supplies less dependent on the availability of foreign exchange.

(3) Population, Labour Force Supply and Employment

That many African governments realize that there is some sort of relationship between population and especially population growth and labour supply, is clearly evident from statements made in their development plans. What is lacking in many of these statements is the fact that the plans do not give full analysis of the relationships and therefore sometimes a faulty analysis. That the relationship between population as the source of supply and the labour force should be obvious to many governments is not very surprising because the labour force is known by all to be an important and indispensable agent in all production.

It is for this reason that governments recognize that an increasing population provides an increasing supply of labour for the economy or for socio-economic development. "Not only does an increasing labour force provide fuel that, in part, allows for increasing output and economic growth but it also puts pressure on the economy to create jobs and on the service sector to provide education and training programmes to prevent wastage of manpower resources" ^{1/} by making the labour force more effective and useful in the production process. Indications are that the type of pressure referred to is being felt by many African countries and hence the apparent realization of the relationship between population growth and the growth of the labour force.

As the main, or to be precise, the only source of supply, anything that affects the total population will obviously affect the labour force. This effect could either be felt in the form of numbers, or transformation through education for the population which is vital to make the labour force more productive. In terms of numbers the main dynamics of population growth are fertility, mortality, and in some cases, also migration. Anything that increases the total population also increases the supply of labour ultimately, while factors that reduce the total population also reduce the size of labour force if not immediately at least in the long run.

With the current high rates of fertility and declining mortality which give rise to the current high rate of population growth, the labour force is also increasing at a high rate, in fact, faster than can be provided for in many countries. The age composition of a country's population usually gives an

^{1/} Economic Commission for Africa, 1971. Population Growth and Social and Economic Development in Africa. (E/CN.14/POP/46) - (A review and Discussion of Country Case Studies).

indication both of the potential labour force and the burden that the adult population, or the working population has to bear to upkeep the young and old. One of the most obvious features of the population of African countries is that, it is young. The populations of most African countries have at least about 43 percent in the age group 0-14 as against about 25 percent in a typically developed country. With the high proportion of children in the population the proportion in the age groups 15-64 that usually should be providing the labour force is only about 52 percent as compared with usually about 62 percent in a developed country. This is a trend which will continue in Africa for some time to come since the relationships between the variables that influence the trend are not likely to change appreciably in the foreseeable future.

Despite the high proportion of young people and the time it takes for an age group to join the ranks of the labour force usually after an average of fifteen years, indications are that the labour force is also growing at a very fast rate - in some cases at a faster rate than the total population as shown in Table 1. The table shows that additions to the potential labour force or the source of the labour force, the population aged 15-64 between 1975 and 2000 will be relatively higher than or equal to the additions to the total population in many countries. At the continental level the potential labour force is increasing at an annual rate of 3.1 percent while the total population is increasing at 3.0 percent. The expected total percentage addition to the potential labour force is 112 as compared with 104 for the total population. Tunisia once again illustrates here the effects of declining fertility. Thus while the proportion of the young decreases the proportion in the working age groups increases. The case is even made worse in Africa by the fact that children in Africa enter the labour market earlier than their counterparts in developed countries because they are not in school.

On the other hand, the prospects of providing jobs for the growing labour force are not very bright in Africa. This is because economic and social development has not been proceeding at as fast a rate as the growth in the total population and specifically in the labour force. It has been estimated that in Egypt, for instance, the proportion of the labour force that will remain unemployed in 1980 will be about 17 percent and 18 percent in 1985. This figure, though expected, to decline will only fall to about 12 percent in the 2000. ^{1/} This is a trend that has become a constant cause of concern to many African countries.

In a number of African countries migration has an important influence on the supply of labour. Countries like Ivory Coast, Nigeria and Ghana (especially in the 1960s) depend to a considerable extent on migrant labour from neighbouring countries. On the other hand countries like Malawi, Lesotho, Botswana and

^{1/} Mostafa Abd-El Ghani Wahbe, (1979) The Structure of the Labour Force in the Egyptian Economy up to the year 2000.

Swaziland lose labour to the Republic of South Africa while Tunisia, Algeria and Morocco lose to Europe. In the present state of high degree of unemployment in the latter group of countries this trend may be thought beneficial to the sending countries in a way though there is also the loss of trained manpower to consider. On the other hand it is important to consider what will happen if the pace of socio economic development quickens up and a need arises for the labour lost to other countries. It is not easy to predict whether the direction of migration will then change or not in favour of the countries which now lose labour to others.

The effect of policies affecting trends in migration on such countries can be well illustrated with a few recent political/economic decisions taken by some governments in the region. It is now accepted that the large scale expulsion of aliens from Ghana (1969) and Uganda (1971) affected the pace of socio-economic development in the long run because it deprived the countries of vital manpower in certain industries. In Ghana the cocoa industry is said to have suffered because it depended to a considerable extent on the labour of the foreigners that were expelled. When one considers that Ghana derives over 60 percent of its foreign exchange earnings from the cocoa industry then the effects on the country can be well imagined. Even apart from the direct effects on the economy there could be others which cannot be described in this paper. Similarly, in Uganda, the expulsion deprived the country of skilled manpower; therefore the action could not have had the salutary effects that it was meant to have on the economy. In both countries and in Ghana in particular, part of the reason given for the expulsion was the need to reduce the level of unemployment among nationals, yet it produced such other effects which could have been avoided.

Like the other variables that have been dealt with already, socio-economic development also has some effects on the labour force. Some of these are already self evident in many African countries. First among these is the reduction in specific activity rates in the early ages mainly because of the expansion of educational facilities which keep young people from the active working force for longer time than before. This is a trend that is observable in many African countries. For many African countries where children usually start working at an early age the effect could be quite considerable if education, especially at the secondary level, could be universal both in terms of facilities and the ability to take advantage of the existence of the facilities.

Second is the increased participation of women in socio-economic development. With the expansion in education, more women will tend to work outside the home and thus increase labour supply which could be either burdensome or beneficial depending on the ability of the economy to absorb the additional hands of the increasing number of women entering the work force. The effect could be quite considerable for especially the North African countries where female activity rates have been known to be very low in the past. Related to this is the effect this trend is likely to have on fertility. The usual trend is that in order to be able to work in the modern sector, women will have their deliveries better spaced and, in fact, the numbers reduced for many reasons too, including the desire to give the few they get better education.

Modernization and unequal development of the urban as against rural areas and the resultant increased rural-urban migration is already influencing the labour force in rural areas in that it is depriving the rural areas of labour. This phenomenon has been given as one of the reasons for declining food production in many developing countries.

The Egyptian example given above has become the rule rather than the exception in many African countries as far as employment prospects for the growing labour force are concerned. This is despite the desire expressed in most development plans for rapid rates of population growth as a means of providing the potential labour force needed for rapid socio economic development. Apart from the rapid growth in the potential labour force which obviously outstrips the ability to create job opportunities there are also some basic shortcomings in the structures of the economies which make it more difficult for African economies to create job opportunities in sufficient quantities.

First among these causes is the inability of the educational systems to equip the labour force with the skills actually needed by industry. Even where the skills are provided, the numbers that benefit are not usually in the quantities needed by industry. The result is that while many educated remain unemployed because they do not possess the needed skills, many establishments at the same time remain starved of the personnel they need. Next is the wage and salary structures which do not encourage many to enter certain industries even though they may have the requisite skills. The wage structure in many countries is the type that encourages the technician to leave his usual profession for the non-technical areas which are still more highly rewarded. There is also the tendency to lay emphasis on capital intensive enterprises and to rely on modern labour-saving devices which keep many out of work instead of relying on labour intensive ones which will help put many to work. Then comes the lack of knowledge of the natural resources base and the uses to which the resources can be put. The undue dependence on imported raw materials also limits the ability of governments to create enough jobs for the population. Last but also important is the elitist life style adopted in many countries which makes the population depend on imported goods rather than locally produced ones. This tendency discourages the establishment of local industries which should provide job opportunities for the population.

(4) Population and Food

Just in terms of demand for food, it is obvious that a rapidly growing population poses more problems for an economy and especially the agricultural sector. The problems arise from the fact that on the one hand food production must be increased at a much faster rate to cope with the increasing demand of the population while on the other hand employment must be provided for the growing labour force. An additional problem is created in the sense that it is not only the quantity of food that needs to be considered but also the nutritional aspects of the increasing food demand of the growing population.

"Although at the world level food production has kept ahead of population growth, in a number of developing countries it has fallen behind. In many more of these countries production has risen less than domestic demand and food imports have had to be greatly increased in order to keep up with demand. There is also a clear evidence that "a large part of the current population, especially young children in developing countries is inadequately fed in terms of nutritional requirements". 1/ For many developing countries therefore in addition to providing for future population growth, there is a substantial backlog to meet as well, both in terms of quantity as well as quality for the growing population.

There is enough evidence that all the problems referred to by the FAO above are all with Africa in a big way. Today, the problems are even worse in all its aspects than it was five years ago, when the FAO made those statements about the world's developing countries. In terms of demand the evidence is that food production in Africa has been lagging behind the rate of population growth. Thus on the basis of current trends while the annual rate of population growth increased from 2.6 % for the period 1963-1970 to 2.8 % for the period 1970-1977, the growth in gross agricultural production fell from 2.7 % per annum to 1.47 % for the same periods. The FAO estimates that the absolute number of undernourished people has been on the increases and that by 1974-76 the number in this category had risen to about 22 percent of the total population of the continent. FAO figures also indicate that during the period 1963-1975 while population in Africa increased at an average annual rate of 2.6 percent agricultural production increased at 2.0 percent while demand for food increased at 2.6 percent. The future trend is even predicted to be worse. Thus while population is expected to grow at the rate of about 3.0 percent, agricultural production will be growing at 2.3 percent while demand for food will be growing at 3.7 percent per annum. For Africa FAO explains that the problem is made worse "in part by the projected acceleration in population growth".

Estimates show, for instance, that in terms of quantity deficits in cereal production in Africa will be increasing continuously from 2 million tons in 1963 to 6.9 million in 1975, 24 million in 1990 and 44 million in 2000, thus decreasing Africa's self-sufficiency in cereal production from a ratio of 35 percent in 1963 to 61 percent in 2000. The situation is no better in other areas of food and agricultural requirements of the population. In terms of the nutritional levels, the situation is no better either. FAO's analysis of the recent past shows that large numbers of the people remain undernourished even when their country has enough food to meet average national requirements. It may be pointed out that in terms of nutritional quality there is a great need to increase protein supply in Africa because of the high proportion of young people which demographic trends give rise to in Africa's population. However the evidence is that the decreasing self-sufficiency ratios in cereal production shown above is also repeated in livestock production, which FAO estimates will fall from 116 percent in 1963 to 102 percent in 2000. FAO further estimates that the number of undernourished is expected to increase from 68 million in 1975 to 81 million in 1990 and 110 million in 2000.

1/ FAO, Agriculture : Toward 2000 (C 72/24), July 1972.

The result of these trends in Africa has been the increasing dependence on food imports from other regions to supplement the inadequate domestic supplies. It is estimated that in 1962-74 Africa spent as much as about 600 million US dollars on food imports. This figure trebled to 1844 million ^{1/} by 1972-1974 and is expected to increase further unless the food production situation changes radically. As the FAO puts it "there is a growing impatience on the part of the poor - be they countries or communities - to be given the opportunities to improve their lives. One result will be to sharpen those changes which are centred on food. The first challenge as seen by FAO is "to achieve a significant acceleration in food and agricultural production" which will help both to obtain the needed foreign exchange for imported inputs and improve food supplies. "Hence the problems of achieving and sustaining a marked rise in productivity of people and of land in the agricultures of developing countries will continue to be at the centre of the challenge of tomorrow. The second challenge is therefore to ensure that the poor are enabled to earn enough income to be able to buy the food they need. This imperative will require action at the overall policy level but there is also the need and scope for action within the agricultural sector".^{2/}

It appears likely that the crucial factor has not been the rate of population growth itself, but the responses of Governments, with their help. A wide range of government measures, particularly for the provision of infrastructure services and incentives for farmers, are needed if the increase in demand occasioned by rapid population growth is to be reflected at the farm level in a sufficient expansion of food production. It is clear that many developing countries have not been able to meet this challenge. ^{3/} The analysis and conclusions of FAO on food supply and demand in Africa falls in line with the analysis and conclusions of the Monrovia Symposium, which called for radical changes in order to meet the demands of the projected population as a means of avoiding an imminent political instability and as a first priority called for self-sufficiency in food production during the next United Nations Development Decade. The desire to see this implemented is clearly expressed in the Draft Declaration of Commitment of the African Heads of State and Government of the OAU in Monrovia in 1970.

As the Director General of FAO puts it in his foreword to Agriculture toward 2000, "The world could free itself from the scourge of hunger largely by substantial advances in food production in developing countries: yet it cannot all be done within the next five or ten years. What is needed is a sustained effort to the end of the century. There is no new technology that can be relied upon: there are no shortcuts!" ^{4/}

^{1/} FAO Regional Food Plan for Africa ARC/73/5, 1973

^{2/} FAO, Agriculture Toward 2000 (C79/24) July 1970.

^{3/} FAO, Idem

^{4/} FAO, Idem, p. vii.

IV. THE USE OF POPULATION VARIABLES IN DEVELOPMENT PLANNING IN AFRICA

The question to answer is, what has been the experience in Africa in the use of population variables in planning? An examination of the development plans of the sixties reveals that not much attention was paid to population variables and their influence on socio-economic development and vice versa. At least the interrelationships were not given the analysis that were necessary to give an indication of their effects on the policies and action programmes designed for the implementation of the development plans in most of the countries, which had anything that could be called comprehensive development plans. One reason is that, the idea of comprehensive development planning was itself not yet very prevalent in the African region.

In most of the plans the only thing about population referred to was the total population which almost all countries viewed as being rather too small, mainly in terms of overall densities. Even where rates of growth were thought to be high, they were considered desirable merely from the point of view of the bigger populations they would give rise to. They were, for example, not seen in terms of the rapid additions to the school-age population to whom, most governments aimed at giving education in some cases at state expense. The result was that some countries, for example, planned for free universal compulsory education only to be overwhelmed later by the extent of the numbers, mainly because the numbers involved were not estimated as part of the basic data needed in the plans.

To be fair to the planners, the appropriate data were not available in most of the countries. Most of the countries had just gained their independence and their first concern was to undertake programmes which aimed at improving the lot of their people without even thinking of the ultimate effects of some of these programmes on the people, whose interests they were seeking. Sometimes, even when some of the countries recognized, for example, the implications of rapid population growth, they still planned for large-scale expansion of educational facilities without relating the planned expansion to available resources either out of their over-enthusiasm to improve the lot of their people, or because of expectations of resources which ultimately did not materialize. Only very few countries included some policies on some aspects of population which they thought would facilitate the attainment of their planned goals.

A study of the development plans of the seventies both by the ECA secretariat and others ^{1/} indicate that more countries are beginning to use more demographic data and taking account of their influences on plan implementation than they did in their previous plans. Notable among these are Botswana, Algeria, Rwanda, Ivory Coast, Senegal, Tanzania and Uganda whose current or most recent plans obviously contain more demographic data and more detailed discussions of some of the implications of demographic variables for the attainment of the goals of the respective plans.

^{1/} P. Maxwell Stanper, Population Council, 1977. Population and Planning in Developing Nations - A Review of Sixty Development Plans for the 1970s.

The Ivory Coast, for instance, stands out in this regard if one compares its first development plan with its current one 1976-1980. While the previous one had very little to say about only the total population and its growth, the current plan displays an array of data on the total population and its growth levels of fertility and mortality and their expected trends both in the urban and rural areas, the migration element, both internal and external which is known to influence to a considerable extent the population of the country, the active population, projections of the total population under two different assumptions, projections of the school-age and the active population as well as the effect of migration on these. The current plan even goes to the extent of declaring an official Governmental attitude on population trends. The plan declares that in order to resolve the population problems identified, the Ivorian authorities would undertake research on population growth continuously in order to harmonize individual and national interests or wellbeing and protect the mother and child through voluntary family planning and control the volume and trend of immigration to the extent compatible with economic and social development. In this regard migration into the country is to be selective depending on the needs of the economy. Lastly, it is planned to recruit both internal and external migration to keep pace with regional development. Tanzania's second plan talks about the realization that the rate of population growth assumed in the first development plan was far lower than what the actual rate was and said this was an impediment to the attainment of the expected growth in per capita income.

In a similar way as shown by both Stamper 1/ and a study by the ECA secretariat Togo, Tchad, Rwanda, Botswana, Algeria, Senegal and others pursue the issue of population in their recent development plans. Countries like Tchad (1971-1980), Togo (1976-80), Morocco (1973-77), Tunisia (1969-1973), Senegal (1977-81) Uganda (1969-71) and Upper Volta (1972-76) give data on the total population, its growth, projections of the population during the plan period, estimates of the school-age, active populations etc. Some, like Rwanda follow up the data with analysis of the influence of population trends on the pace of development.

Despite these encouraging trends, a lot of improvement is still required. It is the contention of the ECA secretariat that for good planning certain demographic data and especially their trends during the plan period and, in fact, the effects of the trends on the goals of the plan need to be included in development plans. It is hard to see how a plan can envisage the provision of universal free and compulsory education in a country without knowing the expected numbers involved in terms of students and teachers, which will help estimate of the cost involved in the provision of classrooms, equipment and teachers. In its past paper presented at the World Population Conference, UNESCO noted that an appreciation of the numbers not catered for and their implications in terms of costs, may prompt educational reforms in African countries to make it possible to satisfy the needs of more people. 2/

1/ P. Maxwell Stamper, Population Council, 1977, Population and Planning in Developing Countries - A Review of sixty development plans for the 1970s.

2/ UNESCO, Idem.

A number of reasons or causes may be postulated for the apparent neglect or omission of population variables in development planning in Africa. Among these stand out the non-availability of the relevant data, which, despite recent improvement, still have many gaps to be bridged before they could provide the type of refined analysis required for development planning. Even where the data are collected not much of analysis, especially the type that will point out their implications for socio-economic development, is at present undertaken in many of the countries of the region. Allied to these two handicaps is the non-availability of trained nationals to collect and do the requisite in-depth analysis as well as the lack of resources which helps to perpetuate this situation. Another important factor that has contributed to the present state of affairs is the tendency on the part of the planner to think mainly in terms of economics and sometimes ignore other important variables that may come into play in the effort to improve the wellbeing of the population, which is both an agent as well as a beneficiary in this effort. There has generally been the tendency on the part of both the planner and the demographer to work in isolation instead of working together for the same purpose.

The general view that Africa's population size is small and that current crude densities are very low has also led many to believe that there are no population problems to solve. This is because many have come to consider population problems only in terms of numbers or what has come to be known as "population explosion". What has partly contributed to this unfortunate trend of thought is that population studies and issues came to be given a recognition in Africa at a time the whole world was talking mainly about the so-called "population explosion", rapid population growth and the need to reduce the growth. This blinded many, for example, to the fact that even the sparseness of the distribution of population in Africa could be a problem when it comes to the siting of development projects, and made even many well-meaning Africans to interpret the integration of population variables in planning to mean the introduction of 'birth control' measures, which many think of as foreign to Africa.

V. THE FUTURE

As already shown in the earlier sections of this paper, all indications are that population dynamics are playing no small role in producing the plight that African countries face today in their endeavours to improve upon the living standards of their peoples. The age composition of the population and its growth which are the results of high fertility and declining mortality, the distribution of the population which is partly determined by the type of unbalanced distribution of development between urban as against rural areas and between different regions of countries, as well as the distribution of natural resources like fertile land, water and other environmental potentials, and hazards have all contributed immensely both to the potential for and the problems of socio-economic development. It has been amply illustrated that the future of socio-economic development in Africa will not be any better than has been in the past unless new radical measures are adopted to tackle the problems already recognized.

The rate of growth of the population will continue to accelerate thus adding on to the backlog of the unprovided for and the unsatisfied portion of the population. As the population continues to grow the additions to the school-age population and the potential labour force will continue to be larger thus increasing the numbers that have to be provided for. Even if the population gets older as we see happening in countries like Tunisia where the levels of fertility are already declining, this will only reduce the net additions to the school-age population, though not very appreciably, but on the other hand, increase considerably the additions to the potential labour force.

The gains of socio-economic development are likely to add on to the growth problems as far as the population of the continent is concerned. This is because gains in the standard of living are first likely to lead to sharp declines in mortality which in the face of high fertility will increase the rate of population growth. The provision of more educational facilities will be called, which, as has been illustrated cannot be done unless radical reforms in the current system are undertaken. As more women get educated the tendency is that the potential labour force will increase faster, thus putting more pressure on the economy to provide more jobs. Such developments will call for more investment in more productive enterprises. The gist of the issue is that population for whom health and educational facilities have to be provided, the population to be fed, housed and employed is growing faster in Africa than current methods of development have been or will be able to deal with.

VI. RECOMMENDATIONS FOR FURTHER ACTION

The strategy for the African region in the International Development strategy for the Third United Nations Development Decade adopted by the ECA Conference of Ministers at its fifth meeting in Rabat in 1979 specifically recommended that African countries should take account of 1/

- The high rate of population growth in many African countries
- The rapid rate of uncontrolled urbanization
- The high levels of mortality and fertility
- The existing gap in meeting the needs of large groups of people for health, education, shelter, food, employment, etc...
- The imbalance in opportunities for the development and application of latent capabilities in the population of women and children all as a means of speeding-up the rate of socio-economic development in Africa.

It is further recommended that, to be able to properly deal with the population issues referred to above, the following programme of action should be adopted for implementation with the assistance of the ECA secretariat and other international organizations:

- the improvement of demographic data through regular population and housing censuses, and periodic demographic surveys
- the extension and improvement of vital registration systems to cover the entire population
- the proper analysis of data collected through censuses, surveys and vital registration systems
- the formulation and implementation of population policies as part of development plans
- the establishment of special units in planning offices to ensure the proper analysis of demographic data, the formulation of appropriate population policies and their integration in development plans as recommended in the World Population Plan of Action
- the training of nationals both at national and regional population institutes to undertake the data collection, their analysis and the appropriate research which will help the formulation of population policies and their implementation as part of general development strategy
- better collaboration between the statistician and demographer on the one hand and the planner on the other to ensure that demographic data and population policies are put to the service of the nation.

In the other sectors of socio-economic development it will also be necessary to adopt new and radical measures as a means of dealing with the implications of population dynamics. The following recommendations may be considered in this regard:

The system of education has to be radically changed to be able to reach the majority that need education; the content needs to be radically altered to be able to provide the population with the skills needed to make the future labour force more productive. Even labour, employment and wage policies need to be changed to encourage the population to acquire the skills needed for rapid development.

Health policies need to undergo radical changes to make it possible to provide for the basic primary health needs of the majority of the people and thus make them more productive. In this regard the system of training health personnel cannot be ignored nor can the provision of good drinking water, better environmental sanitation, better housing and adequate and nutritious food be forgotten. The provision of more and better food is of course basic. This will call for increased efforts to make the countries depend less on imported food items and to make them self-sufficient as far as possible in food production and thus conserve the foreign exchange spent on food imports for vital imports needed to quicken the pace of socio-economic development. To be able to retain the agricultural labour force in the rural areas where the food is to be produced, emphasis should be put on rural development in order to provide the basic services in the rural areas rather than induce the population to the urban areas in search of these services where they are concentrated at present. Industrial policies should be such as will be able to distribute the potential labour force more evenly within the different parts of the countries rather than induce many to flock to a few areas in search of jobs only to create pressure on the services in those few areas. Policies should be such as will make industrial enterprises depend on local raw materials as much as possible rather than imported raw materials; so also should enterprises be labour-intensive in order to provide as many jobs as possible for the growing population instead of the type that depend too much on labour-saving devices which will render the labour force mainly unemployed.

The future does not seem bright now but could be made at least a little brighter than is foreseen now. However without the desire or the courage political or otherwise to take radical steps, population dynamics are likely to complicate Africa's developmental problems rather than provide the potential for development that many African leaders see in the fast growing population of the continent. One way of bringing the idea of the need for radical change in developmental methods home is for the planner to make it possible for African leaders to know in their development plans the potential as well as the problems that population trends pose for accelerated development and how these can be manipulated for the good of the population. There is no use for example, planning for free and compulsory primary education when one knows that to achieve this under the current system will mean the allocation of perhaps all the country's resources to primary education alone. This can only be realized if the data are made use of during the planning process to provide a sound basis for estimating the cost of any envisaged developmental programme. Unless this is done the impetus needed for the radical changes in Africa called for at the Monrovia Symposium in the Future Development Prospects of Africa Towards the year 2000, will be further postponed which in turn will postpone action and thus speed-up or quicken the onset of the political upheaval and in fact also social upheaval which the Symposium foresaw and antly predicted for Africa.